

AMENDMENTS TO THE CLAIMS

1. – 3. (Canceled)

4. (Currently Amended) The co-culturing carrier according to Claim 6, wherein the cells to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue are cells ~~derived~~ obtained from an animal that is homogeneous or heterogeneous to the fertilized ovum.

5. (Currently Amended) The co-culturing carrier according Claim 4, wherein the cells to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue are cells ~~derived~~ obtained from an endometrium.

6. (Currently Amended) A co-culturing carrier for co-culturing with a fertilized ovum of an animal comprising a cell incorporated type three-dimensionally reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of adhesion and three-dimensional growth of the fertilized ovum, wherein the tissue can substitute a function of endometrial tissue to implant a fertilized ovum and support subsequent growth therefrom, wherein the cell to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue ~~are~~ is pretreated with mitomycin C.

7. (Canceled)

8. (Currently Amended) The co-culturing carrier according to ~~Claim 6~~ Claim 9, wherein the mesh network is composed of one or more natural or synthetic threads and/or a woven mass thereof.

9. (Previously Presented) A co-culturing carrier for co-culturing with a fertilized ovum of an animal comprising a cell incorporated type three-dimensionally reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of adhesion and three-

dimensional growth of the fertilized ovum, wherein the tissue can substitute a function of endometrial tissue to implant a fertilized ovum and support subsequent growth therefrom, wherein the cell incorporated type three-dimensionally reconstructed tissue further comprises one or more extracellular matrix components and/or one or more mesh networks, and wherein the mesh network is bioabsorptive.

10. – 11. (Canceled)

12. (Currently Amended) ~~The~~ A co-culturing carrier according to Claim 11, with a fertilized ovum of an animal comprising a cell incorporated type three-dimensionally reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of adhesion and three-dimensional growth of the fertilized ovum, wherein

- the tissue can substitute a function of endometrial tissue to implant a fertilized ovum and support subsequent growth therefrom,
- the cell incorporated type three-dimensionally reconstructed tissue is tissue/organ engineered from one or more biological materials selected from the group consisting of cells, tissues, and organs,
- said one or more biological materials are obtained from the same animal or a different animal from which the fertilized ovum is obtained and
- the cells obtained from animals is selected from the group consisting of endometrial epithelial cells and stromal cells

wherein the cell incorporated type three-dimensionally reconstructed tissue further comprises one or more extracellular matrix components and/or one or more mesh networks, and wherein the extracellular matrix component is gelated.

13. (Canceled)

14. (Currently Amended) ~~T-The~~ A co-culturing carrier according to Claim 11, with a

fertilized ovum of an animal comprising a cell incorporated type three-dimensionally reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of adhesion and three-dimensional growth of the fertilized ovum, wherein

- the tissue can substitute a function of endometrial tissue to implant a fertilized ovum and support subsequent growth therefrom,
- the cell incorporated type three-dimensionally reconstructed tissue is tissue/organ engineered from one or more biological materials selected from the group consisting of cells, tissues, and organs,
- said one or more biological materials are obtained from the same animal or a different animal from which the fertilized ovum is obtained and
- the cells obtained from animals is selected from the group consisting of endometrial epithelial cells and stromal cells

wherein the cell incorporated type three-dimensionally reconstructed tissue further comprises one or more extracellular matrix components and/or one or more mesh networks, and wherein the mesh network is bioabsorptive.

15. (Currently Amended) ~~The~~ A ~~co-culturing carrier according to Claim 11, with a~~
fertilized ovum of an animal comprising a cell incorporated type three-dimensionally reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of adhesion and three-dimensional growth of the fertilized ovum, wherein

- the tissue can substitute a function of endometrial tissue to implant a fertilized ovum and support subsequent growth therefrom,
- the cell incorporated type three-dimensionally reconstructed tissue is tissue/organ engineered from one or more biological materials selected from the group consisting of cells, tissues, and organs,

- said one or more biological materials are obtained from the same animal or a different animal from which the fertilized ovum is obtained and
- the cells obtained from animals is selected from the group consisting of endometrial epithelial cells and stromal cells

wherein the cell incorporated type three-dimensionally reconstructed tissue further comprises one or more extracellular matrix components and/or one or more mesh networks, and wherein the one or more extracellular matrix components are type-I collagen.

16. (Currently Amended) ~~The~~ A co-culturing carrier according to Claim 11, with a fertilized ovum of an animal comprising a cell incorporated type three-dimensionally reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of adhesion and three-dimensional growth of the fertilized ovum, wherein

- the tissue can substitute a function of endometrial tissue to implant a fertilized ovum and support subsequent growth therefrom,
- the cell incorporated type three-dimensionally reconstructed tissue is tissue/organ engineered from one or more biological materials selected from the group consisting of cells, tissues, and organs,
- said one or more biological materials are obtained from the same animal or a different animal from which the fertilized ovum is obtained and
- the cells obtained from animals is selected from the group consisting of endometrial epithelial cells and stromal cells

wherein the cell incorporated type three-dimensionally reconstructed tissue further comprises one or more extracellular matrix components and/or one or more mesh networks, and wherein the one or more mesh networks comprise gauze or cotton.

17. – 20. (Canceled)

21. (Currently Amended) ~~The A~~ co-culturing carrier ~~according to Claim 20, with a~~
fertilized ovum of an animal comprising a cell incorporated type three-dimensionally
reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of
adhesion and three-dimensional growth of the fertilized ovum, wherein

- the tissue can substitute a function of endometrial tissue to implant a fertilized
ovum and support subsequent growth therefrom,
- the cell incorporated type three-dimensionally reconstructed tissue is tissue/organ
engineered from one or more biological materials selected from the group
consisting of cells, tissues, and organs,
- said one or more biological materials are obtained from the same animal or a
different animal from which the fertilized ovum is obtained and
- the cells obtained from animals is selected from the group consisting of
endometrial epithelial cells and stromal cells and

wherein the cells derived from animals is selected from the group consisting of bovine
endometrial epithelial cells and bovine stromal cells.

22. (Canceled)

23. (Previously Presented) A co-culturing carrier for co-culturing with a
fertilized ovum of an animal comprising a cell incorporated type three-dimensionally
reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of
adhesion and three-dimensional growth of the fertilized ovum, wherein the tissue can
substitute a function of endometrial tissue to implant a fertilized ovum and support
subsequent growth therefrom, wherein the cell incorporated type three-dimensionally
reconstructed tissue further comprises one or more extracellular matrix components

and/or one or more mesh networks, and wherein the one or more mesh networks comprise gauze or cotton.

24. – 26. (Canceled)

27. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 6 into a culture vessel and culturing the fertilized ovum of an animal.

28. (Canceled)

29. (Previously Presented) A co-culturing carrier for co-culturing with a fertilized ovum of an animal comprising a cell incorporated type three-dimensionally reconstructed tissue for co-culturing the fertilized ovum of an animal for the purpose of adhesion and three-dimensional growth of the fertilized ovum, wherein the tissue can substitute a function of endometrial tissue to implant a fertilized ovum and support subsequent growth therefrom, wherein the cell incorporated type three-dimensionally reconstructed tissue further comprises one or more extracellular matrix components and/or one or more mesh networks, wherein the mesh network is composed of one or more natural or synthetic threads and/or a woven mass thereof, and wherein the mesh network is bioabsorptive.

30. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 29 into a culture vessel and culturing the fertilized ovum of an animal.

31. (Previously Presented) The method of culturing a fertilized ovum of an animal, comprising introducing the co-culturing carrier according to Claim 9 into a culture vessel and culturing the fertilized ovum of an animal.

32. – 33. (Canceled)

34. (Currently Amended) The co-culturing carrier according to Claim 9, wherein the cells to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue are cells ~~derived~~ obtained from an animal that is homogeneous or heterogeneous to the fertilized ovum.

35. (Currently Amended) The co-culturing carrier according Claim 34, wherein the cells to be incorporated in the cell incorporated type three-dimensionally reconstructed tissue are cells ~~derived~~ obtained from an endometrium.

36. (Canceled)

SUPPORT FOR THE AMENDMENTS

Claims 1-3, 10, and 24-26 were previously canceled

Claims 7, 11, 13, 17-20, 22, 28, 32, 33, and 36 have been canceled.

Claims 4-6, 8, 12, 14-16, 21, and 35 have been amended.

The amendment of Claims 4-6, 8, 12, 14-16, 21, and 35 are supported by the
previously pending claims.

No new matter has been introduced by virtue of the amendment presented herein.